

279 some what resembles it. I copied this from A picture in Mr. Clark's Collection of Paintings." Some of our modern bird skimmers might get amusement, if not inspiration, from the methods in vogue over two hundred years ago, for in his "Directions for preserving All Animals, viz; Beasts, Birds, Fishes, Serpents, Insects, Shells, Fossills &c. so as to keep" he says: "Thirdly, as to Fowls, those that are large, if we cannot have their Cases whole, their Heads, Legs and Wings will be acceptable: but smaller birds are easily preserved entire, by Opening their Bodies which is best done by cutting them under the Wing, and take out their entrails, and then Shutt them with Oakham or Tow mixt with pitch or Tar and being thoroughly dried in the sun, wrap them up Close & keep them from moisture." I know nothing of Roger North who so laboriously transcribed these works but if he had a monument of marble it is not better preserved than this one of paper and nut-gall ink.—FRANK S. DAGGETT, *Oak Park, Ill.*

Supplemental Note to 'A Lapland Longspur Tragedy.'¹—Mr. A. D. Brown of Pipestone, Pipestone Co., in replying to the letter of inquiry sent to him said that twice before in his experience in southwestern Minnesota, extending over a period of twenty-five years, there had been similar considerable destructions of Lapland Longspurs occurring in the spring of the year under like climatic conditions. One of these he describes in some detail as he observed it at Pipestone. A sleet had fallen which froze as it fell, covering the earth with a layer of ice on which three inches of soft wet snow fell. That night the migrating Longspurs entered this ice and snow covered area, many of them hungry and weary, and being unable to procure food finally fell from exhaustion and were either killed by injuries received in striking various objects or remained fluttering about on the ground until the sun rapidly melted the snow and ice the next morning, thus uncovering the fallen seed supply, from which they secured sufficient food to restore their strength and permit them to continue on their way. By afternoon all these birds were gone. Mr. Brown thinks this failure of the food supply the correct explanation of the phenomenon, because when the live birds were picked up that night they fed greedily from seeds provided and quickly gained sufficient strength to fly away. Also the stomachs of many dead birds examined were empty although the bodies were fat. During the early winter, when the Longspurs are abundant, the snow is dry and blows off the ridges and fields, and then, too, the weed tops projecting above the snow still contain many seeds which are later shaken out by the high winds. During the wet snowfalls of early spring, conditions are quite different and the ground-feeding seed-eaters occasionally find their food supply suddenly withdrawn over wide areas. Three was no snow at Pipestone at the time of the last destruction and although the Longspurs were present in great numbers none perished at

¹ Published in this number of 'The Auk', pp. 369-377. This note was received from the author too late to be added as a footnote at the end of the article.—EDD.

that place. This theory of Mr. Brown's of rapid exhaustion from sudden withdrawal of food seems worthy of consideration and may seem, in part at least, to explain these rather mysterious occurrences.—THOMAS S. ROBERTS, *Minneapolis, Minn.*

RECENT LITERATURE.

Ridgway's 'The Birds of North and Middle America,' Part IV.¹—Part IV of this great work, issued in July of the present year, marks the completion of the first half, carrying the subject through the Oscines and including the first four families of the Mesomyodi. The first four Parts contains, as stated in the Preface, "1,675 species and subspecies, or somewhat more than half the total number of North and Middle American Birds."²

The present volume includes ten families, as follows: Turdidæ, with 12 genera, 54 species and 43 additional subspecies; Zeledoniidæ, monotypic (included in the Turdidæ in the main text and raised to family rank in the addenda, p. 885); Mimidæ, 12 genera, 33 species and 17 additional subspecies; Sturnidæ, including the common Starling, introduced from Europe; Ploceidæ, 2 genera and 2 species, introduced into Porto Rica from Africa; Alaudidæ, 2 genera,—*Alauda*, of casual occurrence in Greenland and the Bermudas, and *Otocoris*, with one species and 25 subspecies; Oxyruncidæ, monotypic; Tyrannidæ, 47 genera, 133 species and 39 additional subspecies; Pipridæ, 7 genera, 15 species and 2 additional subspecies; Cotingidæ, 18 genera, 32 species and 18 additional subspecies. In addition to the 103 genera and 417 species and subspecies formally treated, nearly half as many more are included in the keys and footnotes, so that in many cases nearly all the extralimital South American species of the included genera are passed in review.

Most of the innovations in classification were first made in a special

¹ The Birds of North and Middle America: A Descriptive Catalogue of the Higher Groups, Genera, Species, and Subspecies of Birds known to occur in North America, from the Arctic Lands to the Isthmus of Panama, the West Indies and other Islands of the Caribbean Sea, and the Galapagos Archipelago. By Robert Ridgway, Curator, Division of Birds. — Part IV.

Family Turdidæ — Thrushes.

Family Alaudidæ — Larks. |

Family Zeledoniidæ — Wren-Thrushes.

Family Oxyruncidæ — Sharp-bills. |

Family Mimidæ — Mockingbirds.

Family Tyrannidæ — Tyrant Flycatchers.

Family Sturnidæ — Starlings.

Family Pipridæ — Manakins. |

Family Ploceidæ — Weaver Birds.

Family Cotingidæ — Cotingas. | — |

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²For notices of previous Parts in this Journal, see Vol. XIX, Jan. 1902, pp. 97-102; Part II, Vol. XX, Jan. 1903, pp. 73-76; Part III, Vol. XXII, April, 1905, pp. 219-222.